IN THE CLAIMS:

Listing of claims:

1-8. (canceled without prejudice)

9. (currently amended) A method for forming an air bearing surface on a slider, comprising:

providing a silicon slider body;

forming at least one trench in a surface of the silicon slider body; and

forming a carbide structure in the at least one trench;

wherein the carbide structure is formed by a process comprising:

filling the trench in the silicon slider body with a metal carbide and anhydrous metal chloride material;

heating the silicon slider body so that the metal carbide and anhydrous metal chloride material becomes a melt;

after the heating the silicon slider body, cooling the silicon slider body to produce a product material from the melt; and

removing the chloride material formed from the product material.

10. (previously presented) A method as in claim 9, further comprising, after the heating the silicon slider body so that the metal carbide and anhydrous metal chloride material becomes a melt, annealing the silicon slider body for a predetermined time period.

11. (previously presented) A method as in claim 9, wherein the removing chloride material comprises rinsing the surface of the material with at least one liquid selected from the group consisting of water and methanol to remove the chloride material.

12. (original) A method as in claim 9, further comprising planarizing the carbide using a method selected from the group consisting of etching and polishing.

13. (original) A method as in claim 12, further comprising etching the silicon slider body so that the carbide extends outward from the etched silicon slider body.

14. (previously presented) A method as in claim 9, wherein the heating the silicon slider body comprises heating the metal carbide and anhydrous metal chloride material to a temperature of at least 450°C.

15-33. (canceled without prejudice)

34. (currently amended) A method ~~as in claim 31,~~ for forming an air bearing surface on a slider, comprising:

providing a silicon slider body comprising single crystal silicon;

forming at least one trench in a surface of the silicon slider body; and

forming a structure selected from the group consisting of a carbide structure and a nitride structure in the at least one trench; and

forming the structure to extend to a position above the surface of the silicon slider body adjacent to the trench;

wherein the structure comprises a carbide structure; and

wherein the carbide structure is formed by a process comprising:

positioning a metal carbide and an anhydrous metal chloride in the trench;

forming a melt in the trench by heating the metal carbide and the anhydrous metal chloride;

after the heating, cooling the melt to yield a cooled product material; and

removing chloride material from the cooled product material.

35. (previously presented) A method as in claim 34, wherein the removing chloride material comprises rinsing the surface of the cooled product material with at least one liquid selected from the group consisting of water and methanol.

36. (previously presented) A method as in claim 34, wherein the heating comprises heating the metal carbide and anhydrous metal chloride material to a temperature of at least 450°C.

37. (previously presented) A method as in claim 34, further comprising forming a layer comprising titanium in the trench prior to the positioning a metal carbide and an anhydrous metal chloride in the trench.

38. (currently amended) A method as in claim 9, further comprising forming a layer comprising titanium in the trench prior to the filling the trench in the silicon slider body with [[a]] the metal carbide and anhydrous metal chloride material.

39-42. (canceled without prejudice)